U.S. Department of the Interior Bureau of Land Management Little Snake Field Office 455 Emerson Street Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA NUMBER: DOI-BLM-CO-N010-2012-0019-EA

CASEFILE/ALLOTMENT NUMBER: 0501050/04551

PROJECT NAME: Renewal of the grazing permit on the Middle Timberlake Allotment

#04551

LEGAL DESCRIPTION: See map Attachment 1.

Middle Timberlake #04551 T10N R91W, all or parts of sections 6, 7, 18, 19

T10N R 92W, all or parts of sections 1-4, 9-

11,13-16, 20, 21, 23, 24

3,998 Acres Private Land 3,860 Acres BLM Land 7, 858 Total Acres

APPLICANT: McStay Brothers Inc.

PLAN CONFORMANCE REVIEW: The proposed action was reviewed for conformance (43 CFR 1610.5, BLM 1617.3) with the following plan:

Name of Plan: Little Snake Record of Decision and Resource Management Plan (RMP)

<u>Date Approved</u>: October, 2011

<u>Results</u>: The Proposed Action and all alternatives are consistent with the Little Snake Record of Decision and Resource Management Plan, Livestock Grazing Management goals to manage resources, vegetation, and watersheds to sustain a variety of uses, including livestock grazing, and to maintain the long-term health of the rangelands; provide for efficient management of livestock grazing allotments; and contribute to the stability and sustainability of the livestock industry.

Section/Page: 2.14 Livestock Grazing/RMP-41

NEED FOR PROPOSED ACTION: BLM grazing permit #0501050 which authorizes grazing on the Middle Timberlake Allotment #04551 expires on February 28, 2012. This permit is subject to renewal at the discretion of the Secretary of the Interior, who delegated the authority to BLM, for a period of up to ten years. The U.S. Bureau of Land Management has the authority to renew the livestock grazing permit consistent with the provisions of the *Taylor Grazing Act*, *Public Rangelands Improvement Act*, *Federal Land Policy and Management Act*, and Little Snake Field Office's *Record of Decision and Resource Management Plan*. This Plan includes the *Colorado Public Land Health Standards* and the *Guidelines for Grazing Management*.

The following Environmental Assessment (EA) will analyze the impacts of livestock grazing on public land managed by the BLM. The analysis will recommend terms and conditions to the permit/lease which improve or maintain public land health. The Proposed Action will be assessed for meeting land health standards.

In order to graze livestock on public land, the livestock producer (permittee/lessee) must hold a grazing permit/lease. The grazing permittee has a preference right to receive the permit if grazing is to continue. The land use plan allows grazing to continue. This EA will be a site specific look to determine if grazing should continue as provided for in the land use plan and to identify the conditions under which it can be renewed.

<u>PUBLIC SCOPING PROCESS</u>: The BLM Little Snake Field Office sent out a Notice of Public Scoping on December 15, 2010 to determine the level of public interest, concern, and resource conditions on the grazing authorizations that were up for renewal in FY 2012. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on permit/lease renewals. Individual letters were sent to the effected permittees/lessees, informing them their permit/lease was up for renewal and requesting any information they wanted included in or taken into consideration during the renewal process. Mr. Wes McStay, permittee, responded in development of alternatives. There were no other responses.

BACKGROUND: The Middle Timberlake Allotment is classified under the Taylor Grazing Act as a Section 3 allotment with a BLM management classification of "I", Improve. The Middle Timberlake Allotment is located approximately 21 miles north of Craig CO, and 13 miles south of the Wyoming state line. Lying west of Colorado State Hwy 13 the allotment is bisected by Moffat County Roads 3 & 17. This allotment is comprised of a mix of public and private lands used in conjunction and has an 11 pasture deferred rotation grazing system in place. In 2006, wildfire (Divide fire) burned the majority of the western half of the allotment.

This allotment is bisected by the ephemeral East and West Timberlake Creek drainages and contains numerous tributaries to these drainages. Surface runoff entering the East and West Timberlake Creek drainages flows into the Little Snake River. The East and West Timberlake Creeks have been historically mined for gold and there is one current BLM permitted placer gold mine on the West Timberlake Creek.

The Middle Timberlake Allotment is authorized for 421 Animal Unit Months (AUMs). This repetitive long season of use (SOU) in each pasture allows for adaptive management in terms of annual, seasonal, and conditional flexibility and for a deferred rotational grazing system that allows larger numbers of cattle to be moved through pastures for shorter periods of time during the authorized SOU, shown on the permit. The McStay's have been implementing a deferred rotational grazing system like this for over ten years. As long as the authorized season of use and public land AUMs are not exceeded livestock numbers in any given pasture will vary.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Administrative Actions: In the past the percent public land for the Middle Timberlake Allotment has been calculated for each individual pasture which ranged between 11% and 98%. For administrative clarity percent public land will be calculated for the entire allotment which is 49% percent public land.

Proposed Action - Alternative A

Renew the grazing permit on the Middle Timberlake Allotment #04551 and implement range improvement projects described in this alternative. This permit term would begin on March 1, 2012 and expire on February 28, 2022.

The terms and conditions for this alternative would be as follows, reflecting a change in SOU in pasture eight:

From:

Allotment	Pasture	Livestock Number & Kind	Season of Use	% Public Land	AUMs
	One	20 Cattle	05/01 - 11/02	98	120
	Two	13 Cattle	05/01 - 11/02	98	78
	Three	7 Cattle	05/01 - 11/02	98	42
M: 441.	Four	30 Cattle	07/15 – 11/16	36	44
Middle Timberlake	Five	30 Cattle	07/15 – 11/16	36	44
#04551	Six	35 Cattle	07/15 – 11/16	36	52
#04331	Seven	28 Cattle	10/15 - 11/30	41	18
	Eight	20 Cattle	03/01 - 05/15	18	9
	Nine	10 Cattle	05/01 - 10/31	11	7
	Ten	10 Cattle	05/01 - 10/31	11	7
				Total	421

Special Terms and Conditions:

- 1. Grazing will be limited to no more than 30 days during the active growing season of May 1 to June 30 on any given pasture.
- 2. A rotational grazing system will be followed. The permittee will submit the intended grazing rotation to be reviewed each year with the grazing application.

- 3. Following completion of a reliable water source in pasture 1, a cross fence will be built to divide the pasture into 1A and 1B. Grazing will be alternated between pastures 1A and 1B so that neither pasture will be grazed first for two consecutive years.
- 4. Brush beatings projects should be implemented after grouse nesting season and followed up with two growing seasons rest in the grazing rotation system.

To:

Allotment	Pasture	Livestock Number & Kind	Season of Use	% Public Land	AUMs
	One	40 Cattle	05/01 - 11/02	49	120
	Two	26 Cattle	05/01 - 11/02	49	78
	Three	14 Cattle	05/01 - 11/02	49	42
Middle	Four	22 Cattle	07/15 - 11/16	49	44
Timberlake	Five	22 Cattle	07/15 - 11/16	49	44
#04551	Six	26 Cattle	07/15 - 11/16	49	52
#04331	Seven	24 Cattle	10/15 - 11/30	49	18
	Eight	11 Cattle	04/15 - 06/15	49	11
	Nine	2 Cattle	05/01 - 10/31	49	6
	Ten	2 Cattle	05/01 - 10/31	49	6
				Total	421

Special Terms and Conditions:

- 1. Grazing will be limited to no more than 30 days during the active growing season of May 1 to June 30 on any given pasture.
- 2. Starting in 2012, livestock use in pasture 1A riparian pasture shall be on a 3 year deferred rest rotation controlled by the letdown riparian pasture fence as follows:
 - Year 1 riparian pasture may be used at turnout and throughout authorized SOU.
 - Year 2 riparian pasture may be used after 06/15 for the remainder of authorized SOU.
 - Year 3 riparian pasture is rested.
- 3. Only as absolutely necessary to control the above rotation is the letdown riparian pasture fence to be put up before 05/15. At all times the fence must be appropriately marked to BLM standards for sage grouse protection. BLM will monitor this fence for grouse collision to determine if seasonal use adjustment is needed.

This permit would be subject to Standard and Common Terms and Conditions (Attachment 3).

Range Improvements – Alternative A: (see map Attachment 2a):

1. Construct a permanent electric one wire letdown fence that would create a riparian

pasture in allotment pasture 1A (T10N R91W Sec. 6 W ½). As this fence would eliminate use of one reservoir, designate a location outside the fence line to place a gravel pad and trough to which water from the reservoir could be pumped by a temporary generator driven pump and above ground pipeline. Fence location and design and tank placement location must be approved by a BLM Interdisciplinary Team.

- 2. Retain both fences constructed for protection from grazing after the Divide fire in 2006. These fences were constructed to rest the burned area from grazing for the mandatory two growing seasons. The permittee has requested that the fence be left in place to diagonally split pasture 2 (T10N R92W Sec. 2), and in pasture 4 retain the fence that separates public and private lands (T10N R92W Sec. 16 & 21), this fence will be moved on the eastern ¼ to accurately separate public/private lands. The BLM will enter into a cooperative agreement with the permittee to recognize these fences as permanent range improvements. AUMs and season of use in both pastures will remain the same. The permittee will use these fences at his discretion for pasture forage management.
- 3. In Timberlake Creek Tributary reaches 1 & 2 (T10N R91W Sec. 6 W ½) and tributaries to East Timberlake Creek reach 1 (T10N R92W Sec. 12 NW ¼ NW ¼) the use of "soft engineering" is permitted to restore riparian degradation and erosion. Soft engineering is the use of hay bales, rock, and other natural products for erosion control. No excavation outside of minor work to place soft engineering structures will occur. All soft engineering work will be based on the guidelines and methods described in:

An Introduction to Erosion Control, by Bill Zeedyk and Jan Willem-Jansens, A Joint Publication from Earth Works Institute, The Quivira Coalition, and Zeedyk Ecological Consulting. Third Edition April 2009.

www.quiviracoalition.org/images/pdfs/1902-Erosion_Control_Field_Guide.pdf -

A copy of this document is available at the BLM Little Snake Field Office. All actions related to this improvement(s) must be approved by a BLM Interdisciplinary Team. All products used in soft engineering projects must be from local on ranch resources. Any products used in soft engineering brought in from outside ranch sources must be certified noxious weed free.

Ground disturbing activities would not be constructed from March 1 to June 30 to prevent disruption of nesting grouse species. To prevent noise disturbances to greater sage-grouse during the lekking season, the water pump in Alternative A would only operate between 10 am and 4 pm from March 1 to May 15. Construction of the electric fence would also follow these timing guidelines.

Class III cultural resources inventories would be conducted at the locations of all proposed range improvements. Standard Stipulations for cultural resources are included in Standard Terms and Conditions for the Range Renewal Permit (Attachment 3).

Alternative B

All Terms and Conditions would be the same as Alternative A with some additions and modifications of proposed range improvement projects listed below.

Range Improvements – Alternative B: (see map Attachment 2b):

- 1. Construct a permanent electric one wire letdown fence that would create a riparian pasture in allotment pasture 1A (T10N R91W Sec. 6 W ½). Fence would be constructed with a water gap to the reservoir (T10N R91E Sec 6 SE ¼ NW ¼) that would be excluded in Alternative A. Fence location and design would be approved by a BLM Interdisciplinary Team.
- 2. Retain both fences constructed for protection from grazing after the Divide fire in 2006. These fences were constructed to rest the burned area from grazing for the mandatory two growing seasons. The permittee has requested that the fence be left in place to diagonally split pasture 2 (T10N R92W Sec. 2), and in pasture 4 retain the fence that separates public and private lands (T10N R92W Sec. 16 & 21), this fence will be moved on the eastern ¼ to accurately separate public/private lands. The BLM will enter into a cooperative agreement with the permittee to recognize these fences as permanent range improvements. AUMs and season of use in both pastures will remain the same. The permittee will use these fences at his discretion for pasture forage management.
- 3. In Timberlake Creek Tributary reaches 1 & 2 (T10N R91W Sec. 6 W ½) and tributaries to East Timberlake Creek reach 1 (T10N R92W Sec. 12 NW ¼ NW ¼) the use of "soft engineering" is permitted to restore riparian degradation and erosion. Soft engineering is the use of hay bales, rock, and other natural products for erosion control. No excavation outside of minor work to place soft engineering structures will occur. All soft engineering work will be based on the guidelines and methods described in:

An Introduction to Erosion Control, by Bill Zeedyk and Jan Willem-Jansens, A Joint Publication from Earth Works Institute, The Quivira Coalition, and Zeedyk Ecological Consulting. Third Edition April 2009.

www.quiviracoalition.org/images/pdfs/1902-Erosion_Control_Field_Guide.pdf -

A copy of this document is available at the BLM Little Snake Field Office. All actions related to this improvement(s) must be approved by a BLM Interdisciplinary Team. All products used in soft engineering projects must be from local on ranch resources. Any products used in soft engineering brought in from outside off ranch sources must be certified noxious weed free.

- 4. Construct one reservoir below the existing reservoir (T10N R91E Sec 6 SE ¼ NW ¼) with a water control system so that down channel overflow could be regulated, reducing the potential for event driven headcutting. Exact location, survey & design, and site specific clearances will be conducted by a BLM Interdisciplinary Team and McStay Brothers Inc.
- 5. Install a series of small check dams and water diversion structures in drainages that flow

into Timberlake Creek Tributary and Timberlake Creek. These structures would be excavated soil from the immediate area. These structures would help to slow and divert event driven high flows that are causing erosion and contributing to the headcutting in Timberlake Creek Tributary reach 1. Exact location, survey & design, and site specific clearances will be conducted by a BLM Interdisciplinary Team and McStay Brothers Inc.

6. Utilize quarried rock (rip-rap) to be placed at the north end of Timberlake Creek Tributary reach 1 and on the spillway of the existing reservoir in Timberlake Creek Tributary. Placement of this rip-rap would prevent further erosion caused by event driven high flows and exacerbated by different soil types.

Ground disturbing activities would not be constructed from March 1 to June 30 to prevent disruption of nesting grouse species. To prevent noise disturbances to greater sage-grouse during the lekking season, the water pump in Alternative A would only operate between 10 am and 4 pm from March 1 to May 15. Construction of the electric fence would also follow these timing guidelines.

Class III cultural resources inventories would be conducted at the locations of the proposed range improvements. Standard Stipulations for cultural resources are included in Standard Terms and Conditions for the Range Renewal Permit (Attachment 3).

Alternative C – Reduced Grazing Alternative

This alternative would reduce the active AUMs in the Middle Timberlake Allotment #04551 by 50% from 421 AUMs to 211 AUMs. No range improvements would be implemented.

The terms and conditions for this alternative would be as follows:

From:

Allotment	Pasture	Livestock Number & Kind	Season of Use	% Public Land	AUMs
	One	20 Cattle	05/01 - 11/02	98	120
	Two	13 Cattle	05/01 - 11/02	98	78
	Three	7 Cattle	05/01 - 11/02	98	42
Middle	Four	30 Cattle	07/15 - 11/16	36	44
Timberlake	Five	30 Cattle	07/15 - 11/16	36	44
#04551	Six	35 Cattle	07/15 - 11/16	36	52
#04331	Seven	28 Cattle	10/15 - 11/30	41	18
	Eight	20 Cattle	03/01 - 05/15	18	9
	Nine	10 Cattle	05/01 - 10/31	11	7
	Ten	10 Cattle	05/01 - 10/31	11	7
				Total	421

Special Terms and Conditions:

- 1. Grazing will be limited to no more than 30 days during the active growing season of May 1 to June 30 on any given pasture.
- 2. A rotational grazing system will be followed. The permittee will submit the intended grazing rotation to be reviewed each year with the grazing application.
- 3. Following completion of a reliable water source in pasture 1, a cross fence will be built to divide the pasture into 1A and 1B. Grazing will be alternated between pastures 1A and 1B so that neither pasture will be grazed first for two consecutive years.
- 4. Brush beatings projects should be implemented after grouse nesting season and followed up with two growing seasons rest in the grazing rotation system.

To:

Allotment	Pasture	Livestock Number & Kind	Season of Use	% Public Land	AUMs
	One	20 Cattle	05/01 - 11/02	49	60
	Two	13 Cattle	05/01 - 11/02	49	39
	Three	7 Cattle	05/01 - 11/02	49	21
Middle	Four	11 Cattle	07/15 - 11/16	49	22
Timberlake	Five	11 Cattle	07/15 - 11/16	49	22
#04551	Six	13 Cattle	07/15 - 11/16	49	26
#04331	Seven	12 Cattle	10/15 - 11/30	49	9
	Eight	6 Cattle	04/15 - 06/15	49	6
	Nine	1 Cattle	05/01 - 10/31	49	3
	Ten	1 Cattle	05/01 - 10/31	49	3
				Total	211

Special Terms and Conditions:

1. Grazing will be limited to no more than 30 days during the active growing season of May 1 to June 30 on any given pasture.

This permit would be subject to Standard and Common Terms and Conditions (Attachment 3).

Alternative D – No Grazing Alternative

The application for renewal of the grazing authorization on the Upper Timberlake Allotment #04551 would be denied. As a result, livestock grazing would not be authorized. The BLM would initiate a process in accordance with the 43 CFR 4110.3 regulations to remove authorized grazing on this allotment.

Alternatives Considered but not Analyzed

NEPA requires federal agencies to rigorously explore and evaluate all reasonable alternatives

and to briefly discuss the reasons for eliminating alternatives that were not developed in detail (40 CFR 1502.14). As also required by NEPA, the range of alternatives considered in detail includes only those alternatives that would fulfill the purpose and need for the proposed action.

Continuing Previously Authorized Use Alternative

This alternative is eliminated from detailed study because current land health conditions dictate that management changes must occur (43CFR 4180.2 c). Plus, the permittee has requested some minor season of use changes be considered and has requested some additional range improvement projects be considered as well.

<u>AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES</u>
For the following resources and issues, those brought forward for analysis will be addressed below.

Resource/Issue	N/A or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Air Quality		X	
Areas of Critical Environmental Concern	X		
Cultural Resources			X
Environmental Justice		X	
Flood Plains		X	
Fluid Minerals	X		
Forest Management	X		
Hydrology/Ground		X	
Hydrology/Surface			X
Invasive/Non-Native Species			X
Lands with Wilderness Characteristics	X		
Migratory Birds			X
Native American Religious Concerns			X
Paleontology		X	
Prime and Unique Farmland		X	
Range Management			X
Realty Authorizations		X	
Recreation/Transportation		X	
Socio-Economics			X
Soils			X
Solid Minerals			X
T&E and Sensitive Animals			X
T&E and Sensitive Plants	X		
Upland Vegetation			X
Visual Resources		X	
Water Quality - Ground		X	
Water Quality - Surface			X
Waste, Hazardous or Solid	X		
Wetlands/Riparian Zones			X
Wild and Scenic Rivers	X		
Wild Horse & Burro Mgmt	X		
Wilderness Study Areas	X		
Wildlife - Aquatic			X
Wildlife - Terrestrial			X

CULTURAL RESOURCES

Affected Environment: Grazing authorization renewals are undertakings under Section 106 of the National Historic Preservation Act. Range Improvements associated with the renewal (e.g. fences, water developments etc.) are subject to compliance requirement under Section 106 and will undergo standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment was completed for the Middle Timberlake Allotment (#04551) on December 13, 2011 by Ethan Morton, Little Snake Field Office Archaeologist. The assessment followed the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM-CO-01-026. The results of the assessment are summarized below. Copies of the cultural resource assessment are on file at the Little Snake Field Office.

The prehistoric and historic cultural context for northwestern Colorado has been described in several recent regional contexts. Reed and Metcalf's (1999) context for the Northern Colorado River Basin is applicable for the prehistoric context and historical contexts include overviews compiled by Frederic J. Athearn (1982) and Michael B. Husband (1984). A historical archaeology context has also been prepared for the state of Colorado by Church and others (2007). In addition, an overview of significant cultural resources on BLM-LSFO administered lands has been compiled by McDonald and Metcalf (2006).

Data developed here was taken from the cultural program project report files, site report files, and atlases kept at the Little Snake Field Office. Electronic files were also accessed at the Colorado Office of Archaeology and Historic Preservation through the on-line Compass database system. Government Land Office (GLO) plat maps, patent records, and USGS 1:24,000 scale topographical maps were also reviewed for potential undocumented historic resources.

The table below is based on an analysis developed for the specific allotment in this EA. The table shows known cultural resources, eligible and need data, and those that are anticipated to be in each allotment.

Allotment	Acres	Acres	Percent of	Eligible or	Estimated	Estimated
Number	Surveyed	NOT	Allotment	Need Data	Sites for the	Eligible or
(BLM acres)	at a Class	Surveyed	Inventoried	Sites-	Allotment	Need Data
	III Level	at a Class	at a Class	Known in	*(total	Sites in the
		III Level	III Level	Allotment	number)	Allotment
						(number)
04551 (3860)	259	3601	7%	2	104	26

(Note *Estimates of site densities are based on known inventory data. Estimates should be accepted as baseline figures which may be revised upwards or downwards based on future inventory findings.)

Nine cultural resource studies have been conducted within the Middle Timberlake Allotment resulting in the inventory of 259 acres at a Class III level. These studies resulted in the discovery of seven cultural resources. These resources consist of two prehistoric campsites, a historic stage route, a historic gold mine, and two historic isolated finds. The two prehistoric campsites require additional data before a recommendation can be made regarding their National Register

eligibilities. None of the historic cultural resources are recommended eligible for the National Register. Potential unrecorded historic resources are indicated on the GLO and USGS 1969 *East Timberlake Creek* 1:24,000 scale map. A stage/wagon road is depicted on the 1881 and 1906 GLO plats. A segment of this route has been recorded as a historical road (5MF.6446.1). A "Cabin" is depicted on the 1881 GLO plat and "Wagon Road to Old Placer Mine", fence line, "Irrigation Ditch", and three unnamed roads are depicted on the 1906 GLO plat. Potential unrecorded historic resources depicted on the East Timberlake Creek map consist of a "Placer Mine" (recorded as 5MF.6447), two reservoir, and two structures.

Based on the available data (site density) there are approximately 104 cultural resources on BLM administered land within the allotment. It is likely that approximately 26 of these resources will be eligible for the National Register. Subsequent cultural resource inventory will be conducted in areas where livestock concentrate within ten years of issuance of a permit. This subsequent inventory will consist of approximately 306 acres and involve the evaluation of both "needs data" prehistoric campsites and the evaluation of the potential historic resources identified on the GLO plats and the East Timberlake Creek map. If archaeological or historic sites potentially eligible for the National Register are identified during the subsequent field inventory, and BLM determines that grazing activities are adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer.

Environmental Consequences, Alternatives A, B, and C: The direct impacts that occur where livestock concentrate, during normal livestock grazing activity, include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art (Broadhead 2001, Osbourn et al. 1987). Indirect impacts include soil erosion, gullying, and increased potential for unlawful collection and vandalism. Continued livestock use in these concentration areas may cause substantial ground disturbance and cause irreversible adverse effects to historic properties. Placement of range improvement and feeding grounds, which can create concentration areas, would potentially impact historic properties if they are in close proximity of the placement.

Continued livestock management and proposed range improvements under Alternatives A, B, and C is appropriate, as long as new discovery's of cultural resources are property mitigated if grazing impacts are occurring. If archaeological or historic sites potentially eligible for the National Register are identified during the subsequent field inventory, BLM will field visit these properties and assess the livestock grazing impacts. Any mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer. The livestock impacts will be assessed within the ten-year period of the permit.

Environmental Consequences, Alternative D: While a no grazing alternative alleviates potential damage from livestock activities, cultural resources are constantly being subjected to site formation processes or events after creation (Binford 1981, Schiffer 1987). These processes can be both cultural and natural and take place in an instant or over thousands of years. Cultural processes include any activities directly or indirectly caused by humans. Natural processes include chemical, physical, and biological processes of the natural environment that impinge and

or modify cultural materials. Sites which have been determined eligible for the National Register and are threatened may have to be mitigated.

Standard Stipulations for cultural resources are included in Standard Terms and Conditions for the Range Renewal Permit (Attachment 3).

References Cited

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1982 *An Isolated Empire: A History of Northwest Colorado*. Bureau of Land Management-Colorado. Cultural Resource Series No. 2, Second Edition. Denver.

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Carl D. Spath, David R. Guilfoyle, and E. Steve Cassells

2007 Colorado History: A Context for Historical Archaeology. Colorado Council of Professional Archaeologists, Denver.

Husband, Michael B.

1984 *Plateau Country Historic Context*. Office of Archaeology and Historic Preservation, State Historic Preservation Office, Denver.

McDonald Kae and Michael Metcalf

2006 Regional Class I Overview of Cultural Resources for the BLM Little Snake Field Office. Metcalf Archaeological Consultants, Inc. Eagle, Colorado.

Reed, Alan D. and Michael Metcalf

1999 *Colorado Prehistory: A Context for the Northern Colorado River Basin.*Colorado Council of Professional Archaeologists, Denver, Colorado.

Osbourn, Alan, Susan Vetter, Ralph Hartley, Laurie Walsh, Jesslyn Brown

1987 Impacts of Domestic Livestock Grazing in the Archaeological Resources of Capitol Reef National Park, Utah. Occasional Studies in Anthropology No. 20. Ms. on file, Midwest Archaeological Center, Lincoln, Nebraska.

Schiffer, Michael B.

1987 Formation Processes of the Archaeological Record] Formation Processes of the Archaeological Record. Albuquerque: University of New Mexico Press.

INVASIVE/NON-NATIVE SPEICES

Affected Environment: Invasive plant species and noxious weeds occur within the area of proposed action. Canada thistle, hoary cress (whitetop), musk thistle, scotch thistle, Dalmatian toadflax, downy brome, leafy spurge, perennial pepperweed and knapweeds are known to occur in this area. Other species of noxious weeds could be introduced by vehicle traffic, livestock,

wildlife and other means of dispersal. Principals of Integrated Pest Management (IPM) are employed to control noxious weeds on BLM lands in the Little Snake Field Office.

Environmental Consequences, Alternatives A, B, and C: The impact of livestock grazing to invasive or noxious weed establishment is very similar under these alternatives. Additional consequences relating to range improvements are identified below. Access to public lands for dispersed recreation, hunting, livestock grazing management, livestock and wildlife movement, as well as wind and water, can cause weeds to spread into new areas. Surface disturbance from livestock concentration and human activities associated with grazing operations can increase weed presence. The largest concern in the allotment would be for biennial and perennial noxious weed infestations to establish and not be detected. Once an infestation is detected it could be controlled with various IPM techniques. Land practices and land uses by the livestock operator and their weed control efforts and awareness would largely determine the identification of potential weed infestations within the allotment.

Environmental Consequences, Alternative A: Construction of the riparian pasture fence provides a brief opportunity for introduction of weeds while the ground is disturbed. This disturbance is minimal and would be expected to recover within 2-3 years post construction. The new trough location would also provide an area where invasive weedy species would establish around the perimeter of this use area. This would not be expected to extend much beyond the use disturbance area. Surface protection such as gravel included in the design specifications would mitigate this impact.

Environmental Consequences, Alternative B: Construction of the riparian pasture fence provides a brief opportunity for introduction of weeds while the ground is disturbed. This disturbance along the fence line is minimal and would be expected to recover within 2-3 years post construction. The water gap to the reservoir would also provide an area where invasive weedy species could establish around the perimeter of this use area. This would not be expected to extend much beyond the use disturbance area. Surface protection such as gravel included in the design specifications would mitigate this impact. The new reservoir construction and diversion structures would provide considerable opportunities for noxious and weedy species to establish where excavation or fill would occur. Canada thistle, white top and perennial pepperweed are likely candidates that would easily establish these areas and additional IPM efforts may be required to control weed infestations.

Environmental Consequences, Alternative D - No Grazing: This alternative removes the spread and introduction of weeds by livestock. Additional sources of seed dispersal would still be present throughout the allotment. However, under this alternative there would be no presence by the grazing permittee to assist with the detection of infestations.

MIGRATORY BIRDS

Affected Environment: Plant communities within the Middle Timberlake Allotment are comprised primarily of sagebrush stands with an understory of grasses and forbs and early seral grasslands. A variety of migratory birds may utilize these habitats during the nesting period (May through July) or during spring and fall migrations. The area contains potential nesting

and/or foraging habitat for the following United States Fish and Wildlife Service (USFWS) 2008 Birds of Conservation Concern: Brewer's sparrow, sage sparrow, sage thrasher and loggerhead shrike. Although there are no nests located within the allotment, golden eagles and other raptors likely forage in the area.

Environmental Consequences, Alternatives A and B: While livestock grazing can directly impact reproductive success of migratory songbirds by trampling of nests, it is more likely that it indirectly influences reproductive success due to changes in vegetation such as species composition, height, or cover. The Proposed Action would permit a total of 421 AUMs between May and November each year. Livestock would be rotated through the allotment and grazed in conjunction with private land, ensuring that no area would be grazed during the entire growing season each year. This grazing system would allow for ample growing season rest and adequate plant recovery periods.

Grazing would coincide with migratory bird nesting under both alternatives. Spring grazing has the potential to reduce the amount of herbaceous cover available for nest concealment. Herbaceous cover is an important component for several ground nesting species. Standard terms and conditions would keep utilization moderate. This, combined with movement of livestock through the allotment should minimize any potential impacts to ground nesting species. During land health assessments and recent allotment visits, the uplands were found to be in good condition, providing suitable habitat for migratory bird species. These conditions would continue under the grazing system described in Alternatives A and B. The new riparian pasture would improve conditions in riparian areas where standards are not being met. This would improve a small amount of migratory bird habitat. Overall, Alternatives A and B would be compatible with maintaining local migratory bird populations.

The proposed pond, check dams and fence construction would have minimal impacts to migratory birds. Nesting attempts may be disrupted and some nests may be accidentally destroyed if the pond or check dams were constructed during the breeding season (May – July). As this would only impact a small area of habitat, potential for impacts would remain low.

Environmental Consequences, Alternative C: Impacts from grazing under Alternative C would be similar to impacts under Alternatives A and B, except that grazing would be at a reduced rate. This may lead to more residual grass cover available for ground nesting species. There would be no impacts to migratory birds or their habitat from range improvement projects under this alternative.

Environmental Consequences, Alternative D: This alternative would lead to increases/improvements in vertical structure, composition and density of herbaceous understory on the allotment as a whole from current conditions. Benefits associated with livestock removal would be most expected in those areas that currently experience concentrated livestock use (such as water sources). Response by migratory birds to vegetative changes would depend on the species, likely providing the greatest benefit to ground and low shrub nesters.

NATIVE AMERICAN RELIGIOUS CONCERNS

Letters were sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Utes Tribal Council, Shoshone Tribal Historic Preservation Officer, and the Colorado Commission of Indian Affairs in the spring of 2011 discussing upcoming projects including range permit renewals the BLM would be working on in FY11and FY12. Letters were followed up with phone calls. No comments were received (Letters on file at the Little Snake Field Office, Craig, Colorado). If new information is provided by Native Americans, additional or edited terms and conditions for mitigation may have to be negotiated or enforced to protect resource values

RANGE MANAGEMENT:

Affected Environment: The current authorized grazing system on the Middle Timberlake Allotment works complementary to the McStay Ranch operations, McStay Ranch has always been a very proactive public land steward, hence the cooperation of McStay Ranch to help BLM in development of Alternatives A and B for this EA. The 11 pasture deferred rotation grazing system allows for great flexibility and forage management based on seasonal, annual, market, and unforeseen conditions. This type of management and flexibility is a prime example of the adaptive management approach to rangeland management.

Environmental Consequences, Alternative A: There would be no adverse effect with implementation of this alternative. This alternative would provide the BLM the most feasible approach in moving failing land health standards toward meeting standards with no interruption to current livestock management and ranching operations. This alternative is the most financially feasible for both the permittee and BLM as the proposed range improvement projects comprise both logistical ease at reasonable cost.

Environmental Consequences, Alternative B: There would be no adverse effects with implementation of this alternative. This alternative would also be a feasible approach in moving failing land health standards toward meeting standards with no interruption to current livestock management and ranching operations. However, BLM would not be financially able to provide any equipment or labor contracts toward any of the check dams or reservoir construction. If this alternative were to be chosen the permittee would have to incur all cost and logistics for the check dams and reservoir construction.

Environmental Consequences, Alternative C – Reduced Grazing Alternative: This alternative would have detrimental impacts to the McStay Ranching operations as overall benefits from authorized public land livestock grazing would be greatly reduced. This would either reduce overall ranching sustainability, and or, overuse private lands to make up for the loss of public land AUMs. At this reduced stocking rate it would not be practical for the BLM or the permittee to invest any funds into additional range improvement projects that would help to move the public lands toward meeting all standards.

Environmental Consequences, Alternative D – No Grazing Alternative: This alternative would in all likelihood end the continuation of the generational McStay Ranch operation as it has and is currently operating. Although livestock would be removed from public lands there is no

guarantee that this alternative would move public lands toward meeting standards as this alternative would greatly reduce active on the ground land management and lower the prioritization for funding and implementation for improvement projects that facilitated land health improvement.

SOCIO-ECONOMIC

Affected Environment: Agricultural practices, energy exploration and development, and hunting are the main economic activities of the area. In this region, livestock operations and public land management are strongly linked through grazing permits.

Environmental Consequences, Alternatives A and B: Indirect benefits to the surrounding economy would occur due to sustained employment opportunities related to the ranching service support industry in the region as well as the economic benefits to state and county governments related to taxes. Profitable grazing operations would continue to supply personal income to the operator and employees, and would have a proportional influence on the regional, Colorado, and national economy.

Livestock grazing activities may impact other public land users and nearby residents, but the impact is not considered substantial due to the intermittent nature of the presence of cattle. Continued authorized livestock grazing at previously levels would not generate high levels of concern, opposition, or dissatisfaction among local residents.

Environmental Consequences, Alternative C and D: Reducing or canceling livestock grazing for permitted operators would have a negative economic impact to affected ranches. A reduction or loss of authorized livestock grazing on public land would reduce the profitability of the ranch, reducing economic benefits to state and county governments related to taxes. These alternatives would generate high levels of concern, opposition, or dissatisfaction among local residents.

SOLID MINERALS

Affected Environment: An active placer plan of operations is located in the grazing allotment. The placer operation uses water from a well to separate ore from sand.

Environmental Consequences, Alternatives A, B, and C: There would be no impact to the existing placer plan of operation. The operation is fenced during operations to protect cattle and wildlife from the operation. During the winter when there is no mining activity, the gates are left open and the ponds are drained to protect wildlife and cattle.

Environmental Consequences, Alternative D – No Grazing Alternative: N/A

SOILS

Affected Environment: The table below (Table 1) describes the major soil groups (over 500 acres) included within the Middle Timberlake Allotment. According to the July 2011 LHA, surface soil characteristics throughout the allotment are relatively stable with a good grass

canopy to help protect from accelerated erosion. There is some evidence of soil and surface litter movement and pedestals in flow patterns. The main hazard for all of these soils is erosion unless close-growing plant cover is maintained. Biological soil crusts are not present, but are not expected in this area.

Table 1. Soil Summary for the Middle Timberlake Allotment (#04551)

	iary for the Mildule Timberiake A	(# 04331)
Soil Map Unit (MU) & Soil Name	7. T G	D 1.4
(Acres in Allot.)	Map Unit Setting	Description
MU 130	<i>Elevation</i> : 6,200 to 7,300 feet	These toeslope soils are well drained with moderate permeability and medium runoff potential. Available
Maysprings coarse sandy loam, 3 to 12 % slopes	Mean annual precipitation: 11 to 13"	water capacity is low and the soil profile is typically 18 to 60" deep,
1925 acres	Ecological Site: Rolling Loam	composed of course sandy loam, sandy clay loam, and course sand.
MU 131	Elevation: 6,200 to 7,200 feet	These soils are well to somewhat excessively drained with moderate
Maysprings-Gretdivid complex, 10 to 20% slopes	Mean annual precipitation: 11 to 13"	permeability and medium runoff potential. Available water capacity is low and the soil profile is typically 18
1283 acres	Ecological Site: Sandyland	to 60" deep, composed of loamy course sand, sandy clay loam, and course sand.
MU 77	Elevation: 6,200 to 7,200 feet	These bench soils are well drained with moderate permeability and medium
Forelle loam, 3 to 12% slopes	Mean annual precipitation: 11 to 13"	runoff potential. Available water capacity is high and the soil profile is
950 acres	Ecological Site: Rolling Loam	typically 60" deep, composed mostly of loam and clay loam.
MU 107	Elevation: 6,800 to 7,300 feet	These hillslope soils are well to somewhat excessively drained with moderate to moderately rapid
Ironsprings-Maysprings-Gretdivid complex, 10 to 20% slopes	Mean annual precipitation: 13 to 15"	permeability and medium runoff potential. Available water capacity is low and the soil profile is typically up
880 acres	Ecological Site: Sandyland	to 60" deep, composed of loamy course sand, course sandy loam, and sandy clay loam.
MU 105	Elevation: 6,200 to 7,300 feet	These hillslope and alluvial fan soils are somewhat excessively drained with
Ironsprings loamy sand, 1 to 15% slopes	Mean annual precipitation: 13 to 15"	moderately rapid permeability and low runoff potential. Available water capacity is low and the soil profile is
652 acres	Ecological Site: Sandy Foothills	typically up to 60" deep, composed of loamy sand and sandy loam.

Data taken from Soil Survey of Moffat County Area, Colorado (2004).

Environmental Consequences, Alternative A: Soils within most of the allotment are sandy loam based, which are the least susceptible to disturbance and wind/water erosion when frozen or snow covered or when wet or moist (late fall through spring). The proposed grazing period for pastures within the allotment varies (mid-April through mid-November), with eight of the ten pastures being available for use during the entire growing season. However, because grazing

would be limited to no more than 30 days in any one pasture during the growing season, vegetation, and therefore soils, remains protected during vulnerable periods. Retaining fences constructed for livestock exclusion following the Divide fire allows for increased flexibility in pasture rotation. Additionally, the creation of a riparian pasture (Pasture 1A) that will be rested one out of every three years provides additional protection to vegetation and soils. Redirecting livestock use away from the riparian area and towards the road would assist in riparian vegetation recovery in Timberlake Creek Tributary and Schaeffer Spring reservoir (the exclosure in this drainage provides a good example of riparian vegetation potential). Soft engineering techniques would also assist in vegetation and soil stability in riparian areas.

Environmental Consequences, Alternative B: Impacts to soils would be similar to Alternative A. Allowing for a water gap in Pasture 1 as part of the riparian fence construction would concentrate cattle use down to and around the Schaeffer Spring water development, resulting in an increase in soil compaction and bare soil in this area. Proposals to construct an additional reservoir within Timberlake Creek Tributary Reach 1 and riprap the lower end of this reach may actually increase soil erosion over the long term (see impacts to Wetland/Riparian Zones for Alternative B). Using soft engineering techniques to create features that better distributes event-driven surface runoff over the uplands would reduce rill erosion that is present in Pasture 1.

Environmental Consequences, Alternative C – Reduced Grazing Alternative: Reducing stocking rates by 50% is likely to improve general soil conditions in most places, since fewer animals will means lighter grazing and less concentration in riparian areas and around water developments. However, no range improvements are proposed as part of this alternative to reduce soil erosion by increasing stability in riparian areas or improving surface runoff distribution in uplands. Without the ability to control or limit access to riparian areas that are some of the most impacted areas within the allotment by livestock use, some level of impact (although reduced) to soils is likely to continue.

Environmental Consequences, Alternative D – No Grazing Alternative: Removal of livestock from public lands would lead to decreased hoof compaction of soil surfaces, especially in riparian areas where livestock tend to congregate, particularly during the summer and in steeper terrain. Over time the lack of compaction, combined with the annual freeze-thaw cycle, may lead to a decrease in soil bulk density and improved soil moisture conditions, which facilitates vegetation germination and root development. Removing livestock would also result in an increase of both plant litter and live vegetative ground cover that would provide more protection from wind and water erosion. Any livestock trails and the resulting erosion would heal over time.

If grazing were to continue on adjacent private or other non-federal lands in the allotment, fences would have to be built by the landowner(s) to prevent trespass onto federally-managed lands. Given the natural tendency of cattle to congregate and trail along fence lines, it is likely that paths and forage depletion would occur along the fences. The resulting decrease in canopy cover would increase the impact of raindrops on the soil surface, while the expected increase in compaction would increase runoff from both rain and snowmelt. These factors would combine to

increase the likelihood of both wind and water erosion in the areas adjacent to fences. This may result in blowouts and gullies which could indirectly impact federal lands through deposition or by the eroded area actually spreading onto federal lands.

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no Endangered Species Act (ESA) listed or proposed species that inhabit or derive important benefit from habitats in the general area. Critical habitat for the razorback sucker, Colorado pikeminnow, bonytail chub and humpback chub occurs downstream from the Middle Timberlake Allotment.

The allotment provides important habitat for greater sage-grouse, a BLM sensitive species and a candidate for ESA listing. The allotment is located within a greater sage-grouse "core" area and provides habitat for this species during the breeding, nesting and brood rearing periods. There are several active leks in the vicinity of the allotment, with one active lek located within the boundary of the allotment. Nesting habitat is considered sagebrush stands where there is 15-25% sagebrush cover and at least 25% grass and forb cover, usually within a four mile radius of an active lek. Quality nesting habitat has an understory of grass that provides cover for incubating females. Early brood-rearing habitat is essentially the same as nesting habitat. However, as the summer progresses and the herbaceous understory begins to dry out, many broods move into more mesic areas and wet meadows. Approximately 3,500 acres of sage-grouse nesting habitat was burned in the 2006 Divide wildfire.

The allotment provides habitat for two additional BLM sensitive species, Columbian sharp-tailed grouse and Brewer's sparrow. The area is on the western fringe of sharp-tailed habitat, but sagebrush in the allotment still provides some benefits to this species. Brewer's sparrows are a summer resident in Colorado and nest in sagebrush stands. This species would likely be nesting in the allotment from mid-May through mid-July.

Environmental Consequences, Alternatives A and B:

Big river fish

Livestock grazing and the proposed fence would have "No Effect" to razorback sucker, Colorado pikeminnow, bonytail chub or humpback chub. Impacts to these fish would be from small water depletions cause by water developments.

In July 2008, BLM prepared a Programmatic Biological Assessment (PBA) that addresses water depleting activities in the Colorado River Basin. In response to BLM's PBA, the USFWS issued a Programmatic Biological Opinion (PBO)(#ES/GJ-6-CO-08-F-0010) on February 25, 2009, which determined that water depletions from the Colorado River Basin resulting from BLM actions described in the PBO are not likely to jeopardize the continued existence of the Colorado pikeminnow, humpback chub, bonytail, and razorback sucker or result in the destruction or adverse modification of their critical habitat. The PBO addresses internal and external BLM projects including impoundments, diversions, water wells, pipelines and spring developments. The USFWS determined that projects that fit under the umbrella of the PBA would avoid the likelihood of jeopardy and/or adverse modification of critical habitat for depletion impacts to the

Upper Colorado River Basin if they deplete relatively small amounts of water (less than 100 Acre Feet) and BLM makes a one-time contribution to the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program) in the amount equal to the average annual acre feet depleted by each project. The PBO instructed BLM to make an annual payment to the National Fish and Wildlife Foundation (NFWF) to cover all BLM authorized actions that result in water depletions.

The water projects addressed in this EA will be entered into the LSFO's water depletion log when/if construction occurs. This log will be submitted to the Colorado State Office (CSO) at the end of the Fiscal Year. The CSO is responsible for paying depletion fees based on the annual statewide total.

Greater sage-grouse

Livestock grazing has the potential to reduce residual grass cover, an important habitat component for sage-grouse nest concealment. Season long grazing, concentrated fall grazing or grazing the same areas in the spring and then again in the fall would have the most impacts on residual grass cover since there would be little to no opportunity for re-growth before the nesting season. The Proposed Action would permit a total of 421 AUMs between May and November each year. Livestock would be rotated through the allotment and grazed in conjunction with private land, ensuring that no area would be grazed during the entire growing season each year. In regards to herbaceous understory, new growth would be subject to grazing pressure in pastures that are used early in the season. However, these same pastures would provide good residual grass cover the next nesting season since there would be no fall grazing. Opportunity for new growth for nest concealment would not be impacted in pastures that are used late in the season, however, there would be some reduction of residual grass cover in these pastures for the subsequent nesting season. It is also likely that livestock will spend more time in the early seral grassland areas instead of sagebrush ecosystems when given the opportunity. This would decrease grazing pressure in suitable nesting habitat. The Middle Timberlake Creek Allotment was meeting Land Health Standards and adequate cover for nest concealment in the form of new growth and residual cover are present. With the exception of a few areas, riparian habitats were also found to be in good condition and providing suitable brood rearing habitat for sage-grouse.

Fences can provide new perch sites for raptor species, some of which prey on grouse. Fences also have the potential to result in mortality of individual grouse from collisions with wires which have low visibility. Fences near leks pose a greater risk to grouse species. Under both Alternatives A and B fence markers would be used to increase visibility of the new electric fence, which would help minimize collisions risks. Alternative A, which aligns the fence along the road would be preferred over Alternative B, which allows for a water gap at the pond. Aligning the fence along the road would move the fence farther away from an active lek and would help decrease collision risks. Since several fences exist in the area, including a riparian enclosure near the active lek, it is unlikely that the new fence would increase predation risks from raptor species.

Water development: The proposed pond and other excavation in Alternative B would have minimal impacts to grouse species. Nesting attempts may be disrupted and some nests may be

accidentally destroyed if the pond is constructed during the breeding season. Constructed should not occur from March 1 to June 30 to prevent disruption of nesting and breeding activities.

Columbian sharp-tailed grouse

The allotment is on the western fringe of sharp-tailed habitat and provide limited habitat for this species. The grazing systems described in Alternatives A and B would allow for adequate plant recovery and would help maintain healthy sagebrush. The proposed grazing systems would be compatible with sharp-tailed grouse habitat requirements.

Brewer's sparrow

Grazing can directly impact Brewer's sparrows by trampling nests, or indirectly affect this species by changing components of habitat. Grazing may cause an increase in weed infestations, primarily cheatgrass, which would degrade sparrow habitat. Additionally, the presence of livestock, can increase the abundance of brownheaded cowbirds, increasing the chance for nest parasitism by this species (Holmes and Johnson 2005).

Grazing systems that promote healthy sagebrush communities should be compatible with maintaining Brewer's sparrow habitat. The proposed grazing schedule incorporates rotation and deferment and would help maintain healthy ecosystems. Sagebrush stands in the allotment exist in several seral stages. There are many areas of dense, taller shrubs that would provide potential nesting habitat for this species. Overall, sagebrush habitats on the allotment is in good condition and this is expected to continue under both Alternatives A and B.

Environmental Consequences, Alternative C: Impacts from grazing under Alternative C would be similar to impacts under Alternatives A and B, except that grazing would be at a reduced rate. This may lead to more new growth and residual grass cover available for greater sage-grouse nesting. There would be no impacts to any sensitive species from range improvement projects in this alternative.

Environmental Consequences, Alternative D: This alternative would lead to increases/improvements in vertical structure, composition and density of herbaceous understory on the allotment as a whole from current conditions. Benefits associated with livestock removal would be most expected in those areas that currently experience concentrated livestock use (such as water sources). Improvements in herbaceous understory (height and density) would enhance nesting conditions for greater sage-grouse throughout the allotment as a whole. However, due to the interspersed land status it would be difficult to keep livestock off of public lands without fencing. Additional fencing would lead to increased mortality risks to greater sage-grouse.

UPLAND VEGETATION

Affected Environment: On federal lands the native plant community most prevalent across the Middle Timberlake Allotment consists of Wyoming big sagebrush, western wheatgrass, Indian ricegrass, needle-and-thread, squirreltail, prairie junegrass, and Sandberg bluegrass. Dominant forbs include: lupine, scarlet globemallow, buckwheat, clover, and phlox. Associated with historic homesteading and livestock management a significant portion of this allotment was previously planted to crested wheatgrass. These plantings are returning to sage dominated

communities but the crested wheatgrass is still the dominant herbaceous species. Depending upon levels of past disturbance, some sites may also be composed of undesirable species such as green rabbitbrush, prickly pear cactus, and cheatgrass particularly if fire has been excluded for many years. In 2006, a wildfire burned the western half of this allotment. The fire consumed most of the above-ground biomass within this plant community, resulting in native grasses and forbs currently dominating the burned area. Currently all upland vegetation on the allotment is healthy, productive, and vigorous.

Environmental Consequences, Alternatives A and B: There would be no adverse effects. Current conditions would continue with the exception of the newly created riparian pasture which would see improved production with less consistent utilization that has been historically authorized. This improved condition would not exacerbate the potential fire effects to vegetation resiliency and soils, based on the small acreage and some level of grazing that would continue two out of every three years. Upland vegetation in this riparian pasture would become more resilient to grazing impacts over time.

Environmental Consequences, Alternative C – Reduced Grazing Alternative: Overall utilization would be reduced and subsequently vegetation and litter production would increase. This alternative would in turn provide more fine fuels and in the event of wildfire more extreme fire effects to vegetation resiliency and soils would occur. Current upland vegetative conditions do not warrant implementation of this alternative.

Environmental Consequences, Alternative D-No Grazing Alternative: Removal of grazing would result in increased vegetation and litter production. This alternative would in turn provide more fine fuels and in the event of wildfire more extreme fire effects to vegetation resiliency and soils would occur. Current upland vegetative conditions do not warrant implementation of this alternative.

WATER QUALITY – SURFACE

Affected Environment: Surface runoff in the Middle Timberlake Allotment is channeled into ephemeral tributaries of Timberlake Creek, itself a (mostly) ephemeral tributary of Fourmile Creek. All tributaries flowing to the Little Snake River (which includes Timberlake Creek) from a point immediately below the confluence with Fourmile Creek to the confluence with the Yampa River are use protected and must support Aquatic Life Warm 2, recreation N, and Agricultural beneficial uses. There are no perennial streams or creeks within the allotment, and there are no water quality impairments or suspected water quality issues for waters influenced by the allotment.

Environmental Consequences, Alternative A: Although no perennial surface water exists within the allotment (that isn't developed specifically for livestock), livestock use and concentration of ephemeral drainages can impact downstream water quality by removing vegetation that slows and filters sediments from surface runoff and by depositing waste containing nutrients (nitrogen, phosphorous) and bacteria (*E. coli*) that can be entrained or dissolved in surface runoff that may reach perennial waters downstream. The proposed rest rotation schedule as well as the electric fence construction for pasture 1A would likely improve

water quality by limiting access to riparian vegetation during the growing season and by removing direct livestock contact with the in-channel water development (Schaeffer Spring) and headcuts, where livestock are concentrate to access groundwater seeps. In-channel soft engineering projects would also contribute to improved downstream surface water quality by reducing erosion and scour during surface runoff events and facilitating riparian vegetation establishment.

Environmental Consequences, Alternative B: Impacts to water quality are same as described above for soft engineered projects and electric fence construction. However, permitting a water gap design in the fence will not eliminate direct livestock access to surface water and will act to concentrate livestock use that will in turn maintain or increase the amount of bare ground around the in-channel water source. Check dam/water diversion structures as proposed may also improve water quality by reducing upland rills that are starting to erode and become worse with snowmelt and storm events. Designing these using soft engineering techniques when possible is preferable.

While constructing a second reservoir in Timberlake Creek Tributary reach1 below the Schaeffer Spring reservoir may inundate (and therefore eliminate) some of the headcuts and scouring, it is unlikely to remedy other existing headcuts and in fact may create similar problems further downstream. It is thought that existing headcuts and scour points were caused (or at least continue to exist) as a result of the relatively drastic change in vertical gradient of the channel bed caused by the Schaeffer Spring water development dam. While channels naturally adjust to upstream and downstream influences over time, channel obstructions such as dams can quickly exacerbate instabilities and accelerate the channel degradation (lowering of the channel bed) process downstream. During moderate and high surface flows, obstructions/constrictions can cause a backwater condition upstream, with acceleration of overflow and scour downstream, increasing the potential for sedimentation of surface runoff. Creation of a secondary reservoir is likely to have similar impacts to downstream overall lentic riparian condition and water quality.

Placing conventional rip-rap at the downstream portion of Timberlake Creek Tributary R1 would locally stabilize banks, but may lead to increased erosion below the installation, as rip-rap simply armors straight banks and can lead to an overall increase in runoff speed down a channel. The area proposed for stabilization is scoured and experiences heavy livestock use. Using soft-engineering techniques to slow water movement and promote vegetation establishment over time is more likely to achieve the desired effect of sustainable and long-term improved bank stabilization.

Environmental Consequences, Alternative C – Reduced Grazing Alternative: Reducing stocking rates by 50% is likely to improve downstream water quality, since fewer animals will be concentrating in riparian areas and around water developments. However, no range improvements are proposed here that are designed to increase riparian stability and reduce erosion and bacteria/nutrient inputs. Without the ability to control or limit access to riparian areas that are most impacted by livestock use, there is still the potential for some impact to water quality.

Environmental Consequences, Alternative D – No Grazing Alternative: The potential for indirect impacts to downstream water quality caused by livestock use, such as trampling, trailing, or overgrazing of vegetation that may lead to increased sediment production as well as bacteria and nutrient additions, would be eliminated. This alternative has the greatest potential to benefit overall water quality downstream of the allotment.

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2010. Regulations #33, 37, and 93. http://www.cdphe.state.co.us/regulations/wqccregs/index.html

Kansas State University Research and Extension. 2002. Kansas Grazing Land Water Quality Program: Understanding Grazing Land and Water Quality (pamphlet). www.kdheks.gov/nps/resources/grazing/attach2.pdf

WETLANDS/RIPARIAN ZONES

Affected Environment: Riparian resources within Middle Timberlake Allotment include several ephemeral drainages and springs, most of which are developed for livestock watering purposes. These resources were assessed using the Proper Functioning Condition (PFC) technique in July 2011 and are described below:

Condition Assessment	Wetlands/Springs (acres/miles)	Streams (miles)
Functioning At Risk –	0.8 mile (E. Timberlake Creek R1 & R2 now	
condition improving	assessed as lentic rather than lotic as in past assessments)	
Functioning At Risk – no	0.6 acre (West Timberlake slough)	
trend in condition		
Functioning At Risk –	0.5 acre (E. Timberlake Licorice NWSW and	
condition declining	SENW wet meadows)	
	0.9 (Timberlake Creek tributary R1 & R2 now	
	assessed as lentic rather than lotic as in past	
	assessments)	
Non-Riparian*	0.8 acre (027-01 Schaeffer Spring and 027-02	
1	Dell Spring #2)	1 (W. Timberlake Creek)
TOTAL	1.9 acres, 1.7 miles	1.9 miles

*Schaeffer Spring and Dell Spring #2 are developed for livestock use. West Timberlake Creek Reach 1 was not found to exhibit characteristics that would qualify it as riparian, nor does it seem that the potential exists for it to become so in the future. The channel bottom is sand and no surface water was found despite heavy rains in the previous few days. There is also no true riparian vegetation to indicate a high water table within the channel. There are wetter areas in the pasture adjacent to the channel that indicate a high water table in localized areas.

The lower West Timberlake Creek area has a history of placer mining for gold dating back to the early 20th century and most recently in the early 1980s. Evidence of this mining exists today in the form of highly modified topography, including berms built right in West Timberlake Creek channel to redirect flow. It is suspected that these modifications are responsible for the creation and/or maintenance of the 0.6 acre slough that begins at the bottom of Reach 1 and continues onto private property further downstream. In late summer 2011 another placer mine has reopened on the site of the historic mine.

E. Timberlake Licorice NWSW and SENW wet meadows were determined to be in a downward trend in 2011 because they appear to be dryer than in 1999. Also, upland vegetation and facultative wetland species dominate the slight depressions now when compared to the 1999 assessment. Although the areas were moderately to heavily grazed, livestock are likely not the causal factor in the decline. Timberlake Creek tributary reach 2 was also dryer than in the 1999 assessment. While heavily grazed outside of the riparian exclosure, livestock use is not thought to be a causal factor in this drying trend seen in this part of the allotment. However, the current period of use during the growing season appears to be exacerbating downward trends for riparian vegetation by not allowing for adequate recovery following grazing in this pasture. Timberlake Creek tributary R1 is below both the riparian exclosure and Schaeffer Spring livestock pond. This reach is also heavily grazed and contains numerous headcuts where livestock congregate around standing/seeping surface water. Riparian vegetation species can be found in these headcuts, however upland and facultative vegetation occur throughout the rest of the reach. This area may be drying as well, though the livestock water development above the reach (Shaeffer Spring reservoir) may also be contributing to the drying trend by intercepting surface and subsurface flows.

Environmental Consequences, Alternative A: No true lotic systems exist within the allotment, however, livestock do concentrate in the lentic drainages and seeps, especially in Timberlake Creek Tributary reach1. The electric fence construction and proposed rest rotation schedule for that pasture would improve riparian condition by limiting access to riparian vegetation during two of every three growing seasons and by removing direct livestock contact with the in-channel water development and headcuts, where livestock concentrate to access groundwater seeps. In-channel "soft" engineering projects would also aid in reducing channel gradient at headcuts and contribute to improved riparian condition by reducing erosion and scour during surface runoff events and facilitating riparian vegetation establishment.

Environmental Consequences, Alternative B: Impacts to lentic riparian area condition are the same as described above for soft engineered projects and electric fence construction in Pasture 1A. However, permitting a water gap design in the fence will not eliminate direct, concentrated livestock access to surface water that will in turn maintain or increase the amount of compacted, bare ground around the in-channel water source. Upland check dam/water diversion structures as proposed in Pasture 1B are not within riparian areas, but may act to improve riparian condition by dispersing water across the upland so that runoff will not continue to exacerbate existing rills and the increased sediment that is carried towards Timberlake Tributaries 1 and 2. Designing these check features using soft engineering techniques is preferable, when possible.

While constructing a second reservoir in Timberlake Creek Tributary reach1 below the Schaeffer Spring reservoir may inundate (and therefore eliminate) some of the headcuts and scouring, it is unlikely to remedy other existing headcuts and in fact may create similar problems further downstream. It is thought that existing headcuts and scour points were caused (or at least continue to exist) as a result of constructed change in vertical gradient between the channel bed and Schaeffer Spring dam. While channels adjust naturally to upstream and downstream

influences over time, channel obstructions such as dams can quickly exacerbate instabilities and accelerate channel degradation (lowering of the channel bed) processes downstream. During moderate and high surface flows, obstructions/constrictions can cause a backwater condition upstream, with acceleration of overflow and scour downstream, increasing the potential for sedimentation of surface runoff. Creation of a secondary reservoir is likely to have similar impacts to downstream overall lentic riparian condition and water quality.

Placing conventional rip-rap at the downstream portion of Timberlake Creek Tributary R1 would locally stabilize banks, but may lead to increased erosion below the installation, as rip-rap simply armors straight banks and can lead to an overall increase in runoff speed down a channel. The area proposed for stabilization is scoured and experiences heavy livestock use. Using soft-engineering techniques to slow water movement and promote vegetation establishment over time is more likely to achieve the desired effect of sustainable and long-term improved bank stabilization.

Environmental Consequences, Alternative C – Reduced Grazing Alternative: Reducing stocking rates by 50% is likely to improve overall riparian condition in most places, since fewer animals will be concentrating in riparian areas and around water developments, which are mostly located in/near ephemeral drainages. However, no range improvements are proposed here that are designed to increase riparian stability. Without the ability to control or limit access to riparian areas that are most impacted by livestock use, some level of (reduced) impact to riparian areas is likely to continue.

Environmental Consequences, Alternative D – No Grazing Alternative: Generally speaking, removing cattle from the allotment would likely improve riparian and wetland resource conditions over the long-term. A decrease in herbivory on riparian vegetation and trampling pressure caused by livestock in lentic riparian areas would maintain soil moisture and reduce the potential for erosion and any associated changes to channel geomorphology and wetland form/function, particularly in low and moderate gradient streams where the presence of riparian vegetation is one of the most important factors in maintaining stability. In ephemeral channels and wetlands, reduced livestock grazing pressure may also maintain or raise seasonal water tables during the dry season to a point where facultative and obligate riparian plant species are able to persist or even expand, thereby further increasing channel stability. However, these benefits may not fully be realized if the riparian resource is used by wildlife, particularly large ungulates, since wildlife can also have similar impacts to riparian resources, especially during periods of drought. Also, livestock grazing on adjacent private and other non-federal lands may produce indirect effects to riparian resources on federally managed lands.

WILDLIFE - AQUATIC

Affected Environment: Streams, springs and ponds and the associated riparian vegetation provide potential habitat for small amphibians and other aquatic wildlife. The allotment does not provide habitat for fish species.

Environmental Consequences, Alternatives A and B: The grazing system described in Alternatives A and B should maintain and improve quality riparian habitat for aquatic wildlife

species. The new riparian pasture would help prevent riparian degradation and minimize any potential impacts to aquatic wildlife. Data from allotment visits showed most riparian habitats to be in good condition, providing suitable and productive habitat for aquatic wildlife. These conditions are expected to continue under both alternatives.

Environmental Consequences, Alternative C: Impacts from grazing under Alternative C would be similar to impacts under Alternatives A and B, except that grazing would be at a reduced rate. This may lead to improved conditions to riparian habitats.

Environmental Consequences, Alternative D: Elimination of livestock grazing would result in improved riparian conditions and may improve ecological condition. As conditions improve, the health, vigor and abundance of forage species would increase.

WILDLIFE - TERRESTRIAL

Affected Environment: Native plant communities on the allotment are comprised of sagebrush stands and early seral grasslands. These communities typically provide habitat for big game species as well as small mammals, reptiles and birds. Common species such as coyotes, cottontail rabbits, ground squirrels and several species of migratory birds can be found throughout the area. The allotment provides winter habitat for elk, mule deer and pronghorn, however, none of this habitat is classified as 'critical' winter habitat.

Environmental Consequences, Alternatives A and B: The grazing system described in both alternatives incorporates deferment and rotation, which allows for ample growing season rest and adequate plant recovery periods. Data from land health assessments and allotment visits showed the vegetative community in the area to be meeting land health standard for wildlife habitat. These conditions are expected to continue under the grazing system described in both alternatives. Overall, both alternatives should be compatible with maintaining healthy habitat for terrestrial wildlife species.

Water development: The proposed pond in Alternative B would have minimal impacts to wildlife species. Habitat in the immediate vicinity of the ponds would be degraded by livestock congregation, however, this would not affect the productivity of the surrounding habitat. The water developments would also provide additional water sources for wildlife species.

Fencing: Fences have potential to result in mortality of big game species as elk, mule deer and antelope can become entangled in fence wires during crossing. Since the fence would be a one wire, electric fence, there would be little chance of wildlife entanglement.

Environmental Consequences, Alternative C: Impacts from grazing under Alternative C would be similar to impacts under Alternatives A and B, except that grazing would be at a reduced rate. This may lead to minor increases in forage available for wildlife species. There would be no impacts to wildlife species or their habitat from range improvement projects under this alternative.

Environmental Consequences, Alternative D: Under this alternative there would be no

direct competition between wildlife and livestock for forage, browse or cover. Wildlife habitat would moderately improve. The most noticeable response would likely be from non-game mammals and bird populations, who would benefit with increasing vegetative cover, forage and litter cover. However, due to the interspersed land status it would be difficult to keep livestock off of public lands without fencing. Additional fencing would lead to increased mortality risks to many big game species.

CUMULATIVE IMPACTS SUMMARY:

Cumulative impacts may result from the renewal of this livestock grazing permit and associated range improvements when added to non-project impacts that result from past present and reasonably foreseeable future actions.

Historically, this allotment and surrounding areas have been grazed by both sheep and cattle. Even though many of these areas have seen divisions from large commercial ranches and livestock operations to smaller ranchettes, hobby farms and sustenance ranching, it is not anticipated that land use, emphasizing agricultural practices, in any of the surrounding areas, public or private lands, would experience drastic changes outside of previous and or current use, or be abolished in the foreseeable future.

Wildlife populations in the area are high, especially for deer, pronghorn, and migratory elk that compete with livestock for available forage throughout the area. Agricultural and livestock management fences and other development contribute to habitat fragmentation for many wildlife species.

Numerous maintained and unmaintained roads exist throughout the area, including on the allotment. These roads are used regularly by landowners, hunters, and other recreationist. In association with the implementation of the Final Little Snake Resource Management Plan, 2011 (RMP) a Travel Management Plan (TMP) would be completed within five years. This TMP will provide greater restrictions to OHV use compared to what is currently allowed. These restrictions would remove an additional impact in many areas, thus benefiting natural resources.

Energy and mineral development is currently authorized in many areas inside and outside the area of proposed action and some level of future developments will also occur. This allotment lies west of Colorado State Highway 13 which serves as a transportation and energy corridor. Currently there are two proposed high voltage interstate transmission projects in which one proposed route is along the Colorado State Highway 13 corridor near this allotment. There is currently a permitted and active placer gold mine on the allotment.

In the past, this area has been placer mined since around 1937. The area was known as the Timberlake District. The mining occurred before reclamation laws existed. Un-reclaimed piles of the sand and gravel host rock are prevalent along the flood plains of the channels. The Westside Canal was constructed to bring water to the area to separate the gold from the sand and gravel. Some pieces of the mining and processing equipment remain. There is a new placer operation located on 14 acres within the allotment. It is foreseeable that future mining operations

will occur. If the price of gold is high, there would be more interest in placer mining. Mined areas would be reclaimed to the appropriate post mining land use.

Ranching and agriculture are major economic drivers for the local community and surrounding region. Continuation of these practices would provide commerce, employment, and stability to many businesses, families and individuals who depend on agricultural practices for their livelihood. If Alternative D - No Grazing Alternative, and to a lesser extent Alternative C – Reduced Grazing Alternative, were to be chosen a small number of individuals and families would lose employment and would be forced to seek/or train for other employment, relocate, or rely on public assistance. If this type of no grazing on public land trend were to continue, denying applications and or cancelling other or all public land grazing authorizations, the economy of the region and many other associated industries would no longer be sustainable, thus causing a much larger and far reaching adverse economic and social impact. Currently, and in the foreseeable future, there is no industry, or economic venture that could replace agricultural practices in terms of employment, commerce, and tax based revenue.

There is a consensus in the international community that global climate change is occurring, although defined causal factors and prevention measures are still being debated. There is currently a lack of guidance on how to perform a climate change analysis under NEPA and thus it is appropriate to restrict this discussion to a qualitative review. Livestock grazing under Alternative A and Alternative B would be at the same level as it has historically been, so it follows that methane and carbon dioxide production would stay the same. Therefore, under Alternatives A and B there would be no increased contribution to global climate change. Greenhouse gas production would presumably be further reduced under a reduced grazing or no grazing scenario, although it is likely that at least some of the livestock that would have been grazed on this allotment would simply graze elsewhere.

Future use on adjacent private lands would likely continue to include livestock grazing as a primary use in addition to energy development, recreational use and farming. When added to the existing activities in the project area, approval of this proposed action would not cause undue damage to natural resources.

Alternative A and B, continuing grazing on this allotment, is compatible with other uses, both historic, present, and future and would not add any new or detrimental impacts to those that are already present or will be cumulative in nature. Either of these alternatives may improve riparian conditions in areas where historic grazing has contributed or caused degradation. These alternatives may also contribute to improved downstream water quality.

Alternative C and D choosing either of these alternatives could potentially be a trigger for current land owners to subdivide their private property that would create additional home developments and denser populations. Reducing the open space quality of life many public land users currently enjoy.

STANDARDS

On July 20 & 27, 2011 a Rangeland Management Specialist, Wildlife Biologist, Ecologist, and Biological Technician conducted an upland Land Health Assessment and riparian Proper Functioning Condition Assessment for the Middle Timberlake Allotment.

Allotment	Assessment Date(s)	All Standards Met	Standard(s) Not Met	Current Livestock Management a Causal Factor	Management Actions	
Middle Timberlake #04551	07/20/11 07/27/11	No	Standard 2 Riparian Systems	Yes	Renew permit with rest rotation grazing system for riparian areas. Implement range improvement projects to facilitate riparian areas moving toward meeting standards.	
Comments	2011 assessments demonstrate that an unnamed tributary to East Middle Timberlake Creek (reaches 1 & 2) is not meeting standards, these reaches have not met standards in assessments from 1985 and 1995. In 2002 a deferred rotational grazing system was implemented to move riparian areas toward meeting standards, this effort was not successful. Associated with 2012 permit renewal implement a more aggressive rest rotational grazing system and creation of a riparian pasture to exert more control on grazing in riparian areas not meeting standards. Other riparian areas (East Timberlake Creek reaches 1 & 2) previously not meeting standards or identified as downward trend were found to be improving on an upward trend and currently meeting standards.					

<u>PERSONS/AGENCIES CONSULTED</u>: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office, McStay Brothers Inc.

SIGNATURE OF PREPARER: /s/ Mark Lowrey

DATE SIGNED: 01/17/2012

SIGNATURE OF ENVIRONMENTAL REVIEWER: /s/ Barbara Sterling

DATE SIGNED: 01/18/2012

Finding of No Significant Impact

Based upon a review of this Environmental Assessment and the supporting documents, I have determined that the Proposed Action is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity, as defined at 40 CFR 1508.27 and do not exceed those effects as described in the Little Snake Record of Decision and Resource Management Plan (2011). An environmental impact statement is not required. This finding is based on the context and intensity of the project as described below.

Context: The project is a site-specific action directly involving BLM administered public lands that do not in and of itself have international, national, regional, or state-wide importance.

Intensity: The following discussion is organized around the 10 Significance Criteria described at 40 CFR 1508.27. The following have been considered in evaluating intensity for this Proposed Action:

1. Impacts that may be both beneficial and adverse

The beneficial effects of the Proposed Action includes: in authorizing public land grazing this action sustains the local economy as grazing operations would continue to supply personal income to the operator and employees, and would have a proportional influence on the regional, Colorado, and national economy. This action supports the western livestock industry. The authorized livestock operator(s) have mandatory and special terms and conditions that must be met to maintain their grazing preference. This provides a certain level of stewardship of public lands in that if these lands were to become degraded by any activity or event, natural or human in origin, grazing and or other authorized uses would be terminated. This stewardship role of the livestock operator not only mandates proper livestock and forage management but also provides communication with the BLM as to other activities or events that could cause degradation to public lands. Long term effects would be limited in scope.

2. Degree of effect on public health and safety

There would be no effects on public health and safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

There are no park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas in the Project Area. As described in the EA, impacts to cultural resources were identified for the Proposed Action. As this action is not a new action but a continuation of historic land uses in this area there would be no affect to unique characteristics of the geographic area.

4. Degree to which the possible effects on the quality of the human environment are likely to be highly controversial

Public input regarding the Proposed Action has been solicited during the planning process. The BLM Little Snake Field Office sent out a Notice of Public Scoping on December 15, 2010 to determine the level of public interest, concern, and resource conditions on the grazing authorizations that were up for renewal in FY 2012. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on permit/lease renewals. Individual letters were sent to the affected permittees/lessees, informing them their permit/lease was up for renewal and requesting any information they wanted included in or taken into consideration during the renewal process. Mr. Wes McStay responded and has been working with BLM in development of alternatives. There were no other responses.

5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risk

No highly uncertain or unknown risks to the human environment were identified during analysis of the Proposed Action.

6. Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

The Proposed Action neither establishes a precedent for future BLM actions with significant effects nor represents a

decision in principle about a future consideration.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

No individually or cumulatively significant impacts were identified for the Proposed Action. Any adverse impacts identified for the Proposed Action, in conjunction with any adverse impacts of other past, present, or reasonably foreseeable future actions will result in negligible impacts to natural and cultural resources.

8. Degree to which the action may adversely affect district, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources:

There would be no loss or destruction to these resources. A cultural resources study is initiated prior to any action considered and undertaking under Section 106 of the National Historic Preservation Act. Any adverse effects to Historic Properties are mitigated in consultation with the Colorado Office of Archaeology and Historic Preservation (SHPO).

- **9.** Degree to which the action may adversely affect an endangered or threatened species or its critical habitat There are no threatened or endangered species or habitats for such species present within this allotment.
- **10.** Whether the action threatens a violation of federal, state, or local environmental protection law The Proposed Action violates no federal, state, or local environmental protection laws.

SIGNATURE OF AUTHORIZED OFFICIAL:	/s/ Matt Anderson for
	Wendy Reynolds, Field Manager

DATE SIGNED: February 1, 2012

ATTACHMENT #3 DOI-BLM-CO-N010-2012-0019-EA TERMS AND CONDITIONS

Standard Terms and Conditions

- 1) Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
- 2) They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations;
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based;
 - c. A transfer of grazing preference by the permittee/lessee to another party;
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described;
 - e. Repeated willful unauthorized grazing use;
 - f. Loss of qualifications to hold a permit or lease.
- 3) They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits and leases when completed.
- 4) Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.
- 5) The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
- The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
- 7) Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
- 8) Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.
- 9) Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.

- Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
- 11) No member of, or Delegate to, Congress or Resident Commissioner, after his/her election of appointment, or either before or after he/she has qualified, and during his/her continuance in office, and no officer, agent, or employee of the Department of Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statute (41 U.S.C. 22), 18 U.S.C. Sections 431-433, and 43 CFR Part 7, enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

Common Terms and Conditions

- A) Grazing use will not be authorized in excess of the amount of specified grazing use (AUM number) for each allotment. Numbers of livestock annually authorized in the allotment(s) may be more or less than the number listed on the permit/lease within the grazing use periods as long as the amount of specified grazing use is not exceeded.
- B) Unless there is a specific term and condition addressing utilization, the intensity of grazing use will insure that no more than 50% of the key grass species and 40% of the key browse species current years growth, by weight, is utilized at the end of the grazing season for winter allotments and the end of the growing season for allotments used during the growing season. Application of this term needs to recognize recurring livestock management that includes opportunity for regrowth, opportunity for spring growth prior to grazing, or growing season deferment.
- C) Failure to maintain range improvements to BLM standards in accordance with signed cooperative agreements and/or range improvement permits may result in the suspension of the annual grazing authorization, cancellation of the cooperative agreement or range improvement permit, and/or the eventual cancellation of this permit/lease.
- D) Salt and/or mineral supplements shall be place at least on-quarter mile from water sources or in such a manner as to promote even livestock distribution within the allotment or pasture.
- E) Pursuant to 43 CFR 10.4(g), the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further,

pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

The operator is responsible for informing all persons who are associated with the allotment operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any allotment activities or grazing activities, the operator is to immediately stop activities in the immediate vicinity and immediately contact the authorized officer. Within five working days the authorized officer will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places; -the mitigation measures the operator will likely have to undertake before the identified area can be used for grazing activities again.

If paleontological materials (fossils) are uncovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials and contact the authorized officer. The operator and the authorized officer will consult and determine the best options for avoiding or mitigating paleontological site damage.

- F) No hazardous materials/hazardous or solid waste/trash shall be disposed of on public lands. If a release does occur, it shall immediately be reported to this office at (970) 826-5000.
- G) The permittee/lessee shall provide reasonable administrative access across private and leased lands to the BLM and its agents for the orderly management and protection of public lands.
- H) Application of a chemical or release of pathogens or insects on public lands must be approved by the authorized officer.
- I) The terms and conditions of this permit/lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.